

Application No. 10 / 694,137

Amendment (B) dated March 26, 2007

Reply to Office Action of March 07, 2007

Amendments to the Claims

Cancel the claims of record (1 thru 17) ;

Claim 1 (Cancelled) ; Claim 2 (Cancelled) ; Claim 3 (Cancelled) ; Claim 4 (Cancelled) ; Claim 5 (Cancelled) ; Claim 6 (Cancelled) ; Claim 7 (Cancelled) ; Claim 8 (Cancelled) ; Claim 9 (Cancelled) ; Claim 10 (Cancelled) ; Claim 11 (Cancelled) ; Claim 12 (Cancelled) ; Claim 13 (Cancelled) ; Claim 14 (Cancelled) ; Claim 15 (Cancelled) ; Claim 16 (Cancelled) ; Claim 17 (Cancelled).

Substitute new claims 18 thru 26 as follows:

CLAIMS

Thus having described the invention, I claim:

18. (New) A leak proof pressure activated self opening closure seal for sealing over an interior nozzle opening of a cartridge type container used for dispensing flowable material when said cartridge is pressurized by an application gun;

(a) said cartridge type container comprising:

a hollow cylindrical tube sealed at one end by a sliding interior piston; an opposite end sealed by a wall end; said wall end incorporating a hollow exterior dispensing nozzle with an interior opening in its base; said interior opening having a peripheral surface area extending radially around said interior opening perpendicular to the bore of said nozzle providing a planar surface for bonding said closure seal over said interior opening of said nozzle of said wall end of said cartridge type container;

(b) said closure seal comprising:

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a first layer of frangible sheet material, a second layer of adhesive, a third layer of strengthening sheet material, a fourth layer of adhesive;

(c) wherein said second layer of adhesive, said third layer of strengthening sheet material and said fourth layer of adhesive each contain a duplicate cut out void configuration that are in alignment with each other;

(d) wherein said first layer of frangible sheet material, said second layer of adhesive, said third layer of strengthening sheet material, and said fourth layer of adhesive are permanently laminated together forming said closure seal;

(e) wherein said duplicate cut out void configuration creates a weak area in said closure seal by leaving only said first layer of frangible sheet material covering over said duplicate cut out void configuration;

(f) wherein an annular portion of said closure seal is bonded to said peripheral surface area of said dispensing nozzle of said wall end by said fourth layer of adhesive sealing over said interior opening of said dispensing nozzle of said cartridge type container;

(g) wherein said closure seal is of sufficient strength to remain intact and retain said flowable material in said cartridge type container when said cartridge type container is filled with said flowable material;

(h) wherein said closure seal is of sufficient weakness to break open only in said weak area of said duplicate cut out void configuration thereby allowing said flowable material to dispense out from said dispensing nozzle when said cartridge type container is pressurized by said application gun.

19. (New) The duplicate cut out void configuration of claim 18, wherein said duplicate cut out void configuration includes one or more uncut portions that connect one or more broken open center flaps of said closure seal to the annular portion of said closure seal remaining bonded to said peripheral surface area

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around said interior opening of said dispensing nozzle thereby preventing said one or more broken open center flaps from tearing from said peripheral surface area when said closure seal breaks open.

20. (New) The duplicate cut out void configuration of claim 18, wherein said duplicate cut out void configuration can comprise either a: varied C shaped, H shaped, three or more point star shaped, X shaped, wave shaped, spiral shaped, or circular shaped configuration.

21. (New) The closure seal of claim 18, wherein said annular portion of said closure seal is bonded to said peripheral surface area by: induction sealing; heat sealing; evaporative sealing; reactive sealing; or ultrasonic sealing.

22. (New) The first layer of frangible sheet material of claim 18, wherein said first layer of frangible sheet material is made up of one or more layers of same or different materials, wherein said materials are: metal foil; polymers; plastic; or paper.

23. (New) The third layer of strengthening sheet material of claim 18, wherein said third layer of strengthening sheet material is made up of one or more layers of same or different materials wherein said materials are: metal foil; polymers; plastic; paper or adhesive.

24. (New) The first layer of frangible sheet material of claim 18, wherein said first layer of frangible sheet material is permanently laminated to said third layer of strengthening sheet material by non adhesive means, wherein said non adhesive means comprise cladding or fusion bonding.

25. (New) The flowable material of claim 21, wherein said flowable material can be one of; adhesives; sealants; lubricants; chemicals or foodstuffs.

26. (New) A leak proof pressure activated self opening closure seal for sealing over the interior opening of the hollow dispensing nozzle of a cartridge type container used for storing and dispensing flowable material when pressurized by an application gun; said closure seal comprising;

(a) a layer of frangible sheet material is bonded to a layer of strengthening sheet material; said layer of strengthening sheet material containing a cut out void configuration;

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- (b) wherein bonding means bonding said layer of frangible sheet material to said layer of strengthening sheet material includes an area void of said bonding means that duplicates said cut out void configuration in said layer of strengthening sheet material.
- (c) wherein said cut out void configuration creates a weak area in said closure seal by leaving only said layer of frangible sheet material covering over said cut out void configuration;
- (d) wherein the annular portion of said leak proof pressure activated self opening closure seal is bonded over said interior opening of said dispensing nozzle sealing over said interior opening; said closure seal being of sufficient strength to remain intact when subjected to the internal pressure created in said cartridge during the filling of said cartridge with said flowable material;
- (e) wherein said closure seal is of sufficient weakness to break open only in said weak area of said cut out void configuration thereby allowing said flowable material to dispense out from said dispensing nozzle when said cartridge type container is pressurized by said application gun;
- (f) wherein said cut out void configuration includes one or more uncut portions that connect one or more broken open center flaps of said closure seal to the annular portion of said closure seal remaining bonded to a planar surface area surrounding said interior opening of said dispensing nozzle thereby preventing said one or more broken open center flaps from tearing from said annular portion when said closure seal breaks open;
- (g) wherein said bonding means bonding said closure seal over said nozzle opening includes an area void of said bonding means that duplicates said cut out void configuration in said second layer of strengthening sheet material;
- (h) wherein the said layer of frangible sheet material side of said closure seal is bonded over said interior opening of said dispensing nozzle;
- (i) wherein the said layer of strengthening sheet material side of said closure seal is bonded over said interior opening of said dispensing nozzle;

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- (j) wherein said layer of frangible sheet material is comprised of one or more layers of same or different materials wherein said materials are: metal foil; plastic; polymers; or paper;
- (k) wherein said layer of strengthening sheet material is comprised of one or more layers of same or different materials wherein said materials are: metal foil; plastic; polymers; paper; or adhesive;
- (l) wherein the bursting pressure of said closure seal is can be regulated by varying the thickness of said first layer of frangible sheet material.
- (m) wherein said flowable material includes either one of; adhesives; sealants; lubricants; chemicals or foodstuffs.